



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/519,923

01/03/2005

Norbert Kroth

1454-1588

7678

21171 7590 06/01/2007
STAAS & HALSEY LLP
SUITE 700
1201 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005

EXAMINER

RAMPURIA, SHARAD K

ART UNIT

PAPER NUMBER

2617

MAIL DATE

DELIVERY MODE

06/01/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.		Applicant(s)	
	10/519,923		KROTH ET AL.	
	Examiner		Art Unit	
	Sharad Rampuria		2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

I. The Art Unit location of this application in the USPTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Art Unit 2617.

Continued Examination Under 37 CFR 1.114

II. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 03/07/2007 has been entered.

Disposition of the claims

III. The current office-action is in response to the Amendment Submitted/Entered with Filing of CPA/RCE filed on 03/07/2007.

Accordingly, Claims 1-13 are cancelled, thus, Claims 14-26 are imminent for further assessment as follows:

Claim Rejections - 35 USC § 103

IV. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

Art Unit: 2617

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 14-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Oom et al.** (U.S. Patent No. 6,738,625) in view of **Andersson et al.** [US 6912390].

Referring to claim 14, Oom teaches a method for controlling transmission of data in a radio communication system having a hierarchical network architecture (Figure 2 and Column 1, Lines 32-35), comprising: transmitting load information about a current load situation of the physical resources by the first device to a second device at a second hierarchy higher than the first hierarchy within the hierarchical network architecture for controlling a load distribution (Column 11, Lines 1-5 and Column 10, Lines 64-67).

Oom doesn't teach specifically, administering physical resources for a data transmission to user equipment by a first device at a first hierarchy within the hierarchical network architecture, the first device providing a connection interface to the user equipment. However, **Andersson** teaches in an analogous art, that the administering physical resources for a data

Art Unit: 2617

transmission to user equipment by a first device at a first hierarchy within the hierarchical network architecture, the first device providing a connection interface to the user equipment; (Column 9, Lines 66-Col. 10; 7) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Oom including administering physical resources for a data transmission to user equipment by a first device at a first hierarchy within the hierarchical network architecture, the first device providing a connection interface to the user equipment in order to provide an end-to-end signaling protocol is utilized to establish at least a node-transcendent one of plural distinct connection or link segments comprising a radio connection involving a user equipment unit. The plural distinct connection segments extend in series between a device in a first radio network control node and a device in a base station controlled by a second radio network control node. The first radio network control node serves as a serving radio network control (SRNC) node and the second radio network control serves as a drift radio network control (DRNC) node for the radio connection with the user equipment unit. (Col.5; 11-24)

Referring to claim 15, Oom et al further teaches wherein the load information includes load states for an area of the radio communication system supplied by the first device (Column 7, Lines 49-54 and Column 8, Lines 4-11).

Referring to claim 16, Oom et al further teaches wherein the load information includes load values averaged over time for at least one of defined operating parameters and signaling

types of the radio communication system for radio data connections between user equipment and a third device of a lowest hierarchy (Column 7, Lines 49-60).

Referring to claim 17, Oom et al further teaches cell load reporting; and checking on an assignment of user equipment to specific devices of the lowest hierarchy based on said cell load reporting (Column 1, Lines 31-37, Column 7, Lines 65-67 and Column 8, Lines 1-5).

Referring to claim 18, Oom et al further teaches wherein the radio communication system is a cellular radio communication system (Column 1, Lines 54-59), and wherein said method further comprises checking on a handover option for at least one user equipment from a first cell of the radio communication system to a second cell of the radio communication system based on said cell load reporting (Column 10, Lines 64-67 and Column 8, Lines 4-11).

Referring to claim 19, Oom et al further teaches wherein said cell load reporting includes transmissions depending on particular time events (Column 7, Lines 49-60).

Referring to claim 20, Oom et al further teaches wherein said cell load reporting includes periodic transmissions (Column 7, Lines 49-60).

Referring to claim 21, Oom et al further teaches wherein said cell load reporting includes transmissions depending on specific operational events of the radio communication system (Column 7, Lines 49-60).

Referring to claim 22, Oom et al further teaches wherein said cell load reporting is undertaken as a function of defined load states for the area of the radio communication system served by the first device (Column 1, Lines 31-37, Column 7, Lines 65-67, Column 8, Lines 1-5 and Column 10, Lines 64-67).

Referring to claim 23, Oom et al further teaches wherein said cell load reporting is undertaken as a function of defined threshold values for the load states (Column 10, Lines 64-67 and Column 11, Lines 1-15).

Referring to claim 25, Oom et al teaches a radio communication system having a hierarchical network architecture with devices for control of transmission of data to user equipment and administration of physical resources (Figure 2 and Column 1, Lines 32-35), comprising: at least one high level device at a first hierarchy within the hierarchical network architecture, controlling load distribution of the radio communication system (Column 11, Lines 1-5 and Column 10, Lines 64-67); and at least one low level device at a second hierarchy lower than the first hierarchy, transmitting to said high level device, information about a current load situation of the physical resources (Column 11, Lines 1-5 and Column 10, Lines 64-67).

Oom doesn't teach specifically, administering physical resources for a data transmission to user equipment by a first device at a first hierarchy within the hierarchical network architecture, the first device providing a connection interface to the user equipment. However, **Andersson** teaches in an analogous art, that the administering physical resources for a data

Art Unit: 2617

transmission to user equipment by a first device at a first hierarchy within the hierarchical network architecture, the first device providing a connection interface to the user equipment; (Column 9, Lines 66-Col. 10; 7)

Claims 24 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oom & **Andersson** and further in view of Jain et al. (U.S. Patent Publication No. 20020193118)

Referring to claims 24 and 26, Oom & **Andersson** teaches the limitations of claim 24 and 26, but does not teach controlling a transmission of data packets in a packet data transmission system. Jain teaches controlling a transmission of data packets in a packet data transmission system (0021 and 0032). Therefore at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to combine the teaching of Oom & **Andersson** with the teaching of Jain of controlling a transmission of data packets in a packet data transmission system to understand that the principles of invention could be applicable to other wireless communication systems.

Response to Amendments & Remarks

V. Applicant's argument with respect to claims 14-26 has been fully considered but is moot in view of the new ground(s) of rejection.

Conclusion

VI. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sharad Rampuria whose telephone number is (571) 272-7870. The examiner can normally be reached on M-F. (8:30-5 EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on (571) 272-7495. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://portal.uspto.gov/external/portal/pair>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or EBC@uspto.gov.

/Sharad Rampuria/
Patent Examiner
Art Unit 2617